

Abstract

The invention concerns a method of foaming steel-making slags, wherein calcium nitrate is added to the slag alone or together with carbon. Calcium nitrate and carbon can be fed into the slag trough chutes or trough lances with injection gases such as air, nitrogen, carbon dioxide or inert gases. The solid components can be injected separately or with the same lance as a mixture or injected as pre-fused granules. For ladle slag foaming, calcium nitrate and carbon is added from above the melt. It is preferred to use a ratio between calcium nitrate and carbon in the range from 4:1 to 2:1. For foaming of stainless steel slag, it is preferred to add FeSi, Al or Mg before calcium nitrate and carbon is added or injected into the slag by an injection gas. Air, nitrogen, carbon dioxide or inert gases can be used as injection gas. The invention also concerns the use of calcium nitrate as a foaming agent for steel-making slags. The invention can be used for slag foaming in electric arc furnaces and ladles.